

Abstract

An actuator, in particular for valves, relays, or the like, is disclosed, which has an electromagnet (10) with a magnet coil (11), a magnet armature (12) that can be slid between two end positions, and a magnet yoke (13), and has an actuation tappet (14) driven by the magnet armature (12). In order to produce a bistable actuator with a low power consumption and a low heating of current-carrying components – particularly when long switching times in both switch positions are required, on the one hand, the electromagnet (10) is embodied so that its magnet armature (12) has a stable middle position that is disposed between its two end positions, which are determined by the two switch positions of the actuator, and that can be approached from both end positions by supplying current to the magnet coil (11), and on the other hand, a bistable mechanical locking mechanism (15) is provided, which acts on the magnet armature (12) or on the actuation tappet (14) and comes into play in the end positions of the magnet armature (12) (Fig. 1).